

CLAIMS

I claim:

1. Apparatus for providing to a third system connection information for a connection between first and second systems, the first, second and third systems being connected by a network, comprising;

a network interface;

a selector responsive to the network interface identifying the connection;

memory storing the connection information of the connection; and

an output queue for sending the connection information to the third system.

2. The apparatus of claim 1, wherein the connection information stored by the memory comprises:

at least one data packet; and

connection state information.

3. The apparatus of claim 2, wherein the connection is a TCP connection.

4. The apparatus of claim 1, wherein the first system is a connection host, the second system is a remote host, and the third system is a failover host.

5. The apparatus of claim 1, wherein the first system and the third system solicit ownership information from each other.

6. The apparatus of claim 1, wherein the first, second and third systems are within a cluster of systems.

7. A system for maintaining a connection within a network, comprising:
means for broadcasting ownership information between a first system on which an application is running to at least a second system within the network;

means for determining that the second system will assume the connection for the first system if the first system fails;

apparatus connected to the network and including memory storing packets sent to and received by the first system;

means for determining that the first system is in a failed state; and

means for continuing the application on the second system from the point at which the first system failed, the means for continuing being responsive to the stored packets of the apparatus.

8. The system of claim 7, further comprising a means for broadcasting ownership information when each system is booted.

9. The system of claim 7, wherein the ownership information comprises:
 a fail-over policy;
 a set of IP addresses owned by each system within the network;
 a range of port numbers;
 an application that is currently running on each system;
 a ARP ownership policy;
 a current protocol;
 a set of MAC addresses tied to the IP address(es); and
 a cluster node ID.

10. The system of claim 7, further comprising:

means for returning the first system from a failed state to a normal state; and

means by which connection is regained by the first system from the second system.

11. The system of claim 7, wherein the memory further stores connection state information corresponding to the packets stored in the memory.

12. The system of claim 7, wherein the connection is a TCP connection.

13. The system of claim 7, wherein the first system is a connection host, and the second system is a failover host.

14. The system of claim 7, wherein the first system and the second system solicit ownership information from each other.

15. The system of claim 7, wherein the first and second systems and the apparatus are within a cluster of systems.